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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,801	12/14/2001	Wilhelmus G.M. Bruls	P 284153 9407US/CNT/1	1643

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EXAMINER
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WOODWARD, ANA LUCRECIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS5

## Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- ☒ Responsive to communication(s) filed on 4/22/02, 12/14/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1-21 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-21 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

## **DETAILED ACTION**

### ***Numbering of Claims***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 16-22 have been renumbered as claims 15-21.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 13 and 16, the metes and bounds of the term “functionalized” are indeterminate in scope.

In claim 1, last line, it is unclear as to whether “matrix polymer” is referring to polymer A, polymer B or both.

In claims 10 and 20, it is unclear how the block copolymer can be definitive of a “functionalized” polymer.

In claim 14, the term “obtainable” is indefinite.

### ***Claim Rejections - 35 USC § 102/103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8, 9, 11-18, 20 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 5,889,112 (Shih et al).

Shih et al disclose a staged feeding process for mixing polymers comprising mixing at least a first polymer and a second, dissimilar polymer. The resulting composition comprises a dispersion of one polymer in a matrix of another polymer. In accordance with one embodiment of the invention, a mixture of two “first” polymers is mixed with a portion of the matrix resin making up the final product to form an intermediary composition which is subsequently blended with the remainder of the matrix resin (column 5, lines 63-66). In examples 2-6, a mixture comprising EPDM rubber and EPDM with fumaric acid functionality is melt mixed (stage A) before the addition of nylon in feed stages B, C and D. It is reasonably believed that melt mixing the EPDM rubbers with the nylon in the feed stage B would engender an intermediary composition comprising a dispersion of the rubbers in a matrix of the nylon (said composition essentially corresponding to the rubber composition dispersed in a matrix polymer B of the present claims) and the subsequent nylon added in stages C and D would correspond to applicants’ matrix A. In light of the similarity in ingredients, it is reasonably believed that the functionalized EPDM rubber is present as a shell around a core of the unfunctionalized EPDM.

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The onus is shifted to applicants to establish that the products of the present claims are not the same as or obvious over those of the prior art.

6. Claims 13 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0878510.

EP '510 discloses a composition comprising a dispersed rubber composition in a polyamide matrix, the dispersed rubber composition containing a functionalized rubber and a non-functionalized rubber. It is reasonably believed that said composition may be mixed with a composition comprising a second polymer matrix. The onus is shifted to applicants to establish otherwise.

***Claim Rejections - 35 USC § 102***

7. Claims 7, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,889,112 (Shih et al).

The disclosure of Shih et al, described hereinabove, differs in essence from the above-rejected claims in not expressly disclosing ethylene copolymers obtained in the presence of a metallocene catalyst and in not expressly exemplifying styrene-butadiene tri-block copolymer. It is maintained that the general disclosure of the reference is unlimited with respect to the method of obtaining the ethylene copolymers and, as such, it would have been obvious to one having ordinary skill in the art to have employed an ethylene copolymer obtained by polymerization in the presence of a metallocene catalyst with the reasonable expectation of success. As to the use of a triblock copolymer, the reference clearly discloses styrene butadiene block copolymers as suitable polymers (column 4). Accordingly, no patentability can be seen in the presently claimed subject matter.

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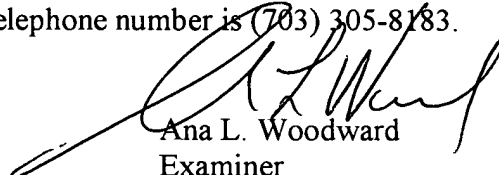
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (703) 308-2401.

The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8183.



Ana L. Woodward  
Examiner  
Art Unit 1711

AW  
January 16, 2003